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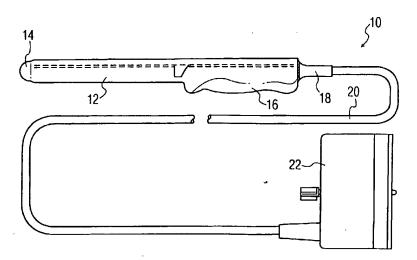
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(54) Title: ULTRASONIC INTRACAVITY PROBE FOR 3D IMAGING



(57) Abstract: An intracavity ultrasound probe includes a pivotally mounted array transducer which is oscillated to scan a volumetric region from within the body. The transducer is oscillated by a motor located in the probe handle. The array transducer is immersed in a liquid which acoustically couples ultrasonic energy between the elements of the transducer and the body. The acoustic coupling liquid is located in the distal tip of the probe shaft, where only 6 cc of liquid is required. The small amount of liquid reduces the weight of the shaft of the probe so that the center of gravity of the probe is in the handle, making the probe comfortable and easy to manipulate. The majority of parts in the probe shaft are made of aluminum or other low density materials, keeping the overall weight of the probe to about 250 grams.

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